ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515–6115

Majority (202) 225-2927 Minority (202) 225-3641

March 6, 2017

Mr. Gill Pratt CEO Toyota Research Institute 325 7th Street, N.W.; Suite 1000 Washington, DC 20004

Dear Mr. Pratt,

Thank you for appearing before the Subcommittee on Digital Commerce and Consumer Protection hearing entitled "Self-Driving Cars: Road to Deployment."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions by the close of business on Monday March 20, 2017. Your responses should be mailed to Giulia Giannangeli, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Giulia-Giannangeli@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Robert F. Latta

Chairman

Subcommittee on Digital Commerce and Consumer Protection

cc: Jan Schakowsky, Ranking Member, Subcommittee on Digital Commerce and Consumer Protection Attachment

Additional Questions for the Record

The Honorable Jan Schakowsky

- 1. You stated that the Toyota Research Institute is working on systems that could detect a heartbeat and changes in skin temperature in the occupants of a car. Do you have a timeline for when this technology will be available? Is Toyota is working on any other technologies to prevent child heat deaths?
- 2. In your testimony, you stated that automatic emergency braking (AEB) will be standard in almost every Toyota model sold this year. How soon will Toyota get to 100 percent?
- 3. I think the best way to keep defective vehicles off our roads is to prevent the sale of used cars under recall until the recall is repaired. Has Toyota committed to not selling used vehicles as "safe," "repaired for safety," passed a "rigorous inspection," and/or qualified to be sold as "certified" pre-owned cars when they have open recalls?
- 4. What assurances will Toyota provide before putting AVs on the roads that they are protected from cybersecurity attacks?
- 5. There is a lot of interest in expanding NHTSA's authority to grant exemptions from FMVSSs. Does Toyota support public notice and a comment period when automakers request an exemption or should NHTSA be allowed to make these determinations without public input? If Toyota does not support notice and comment, why?
- 6. It has been widely reported that autonomous commercial motor vehicles could precede autonomous cars in widespread distribution. Will Toyota be selling AV trucks? If yes, when will this begin? What assurances will Toyota provide to the motoring public that AV trucks are safe?
- 7. There has been a lot of discussion about the importance of data sharing among the companies, with NHTSA, and with the public. I understand the sensitivity around sharing certain company data, and I know that no company wants proprietary information revealed to its competitors.
 - a. Assuming confidential business information is adequately protected and that only relevant safety information is shared, does Toyota agree that more data sharing would help improve self-driving cars and lead to quicker deployment? Does Toyota agree that the public needs more information to know self-driving car are safe?
 - b. Please list types of information that Toyota is willing to share and types of information Toyota is not willing to share? And detail with whom Toyota is prepared to share that information, such as other companies, NHTSA, or the public.

- 8. Some have expressed concern that testing through miles of driving may not adequately represent all real driving conditions, e.g., that such testing is occurring on open highways and not necessarily in city conditions. Please list how many miles Toyota autonomous vehicles have been tested and under what conditions such testing has occurred.
- 9. There has been discussion of level 4 AVs being rolled out as ridesharing fleets before being sold to individuals. How does Toyota plan to educate ridesharing passengers on what to do should a problem occur with those vehicles?
- 10. Some automakers have committed to accepting liability for accidents involving self-driving vehicles. Is Toyota considering this model and if so, would Toyota accept that liability for level 4 vehicles and above?

The Honorable Tony Cardenas

- California has been a pioneer and leader in technology for many years. More recently,
 Southern California and Los Angeles have been home to rapid growth in an exciting
 technology industry. Of course, as policymakers, part of our jobs is to make sure that our
 laws don't fall too far behind. It's definitely easier said than done. Given that, I am
 encouraged by the conversation, and hope that we can continue to explore this in a bipartisan
 way, with the collaboration of industry.
 - a. We know you're concerned with a situation in which 50 states develop 50 different ways of addressing autonomous vehicles. When exploring the development of a federal standard, what within the California standards developed over the past few years has worked well? How has California being at the forefront contributed to AV development?
- 2. As technologies evolve, our workforce also evolves. I've heard some really interesting ideas from companies about how they're thinking about addressing this issue when it comes to our workers.
 - a. Has Toyota studied the possible effects of mass deployment of autonomous vehicles on transportation jobs? If so, are there any initiatives that are being developed to ensure our workforce doesn't get left behind?